Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_

*Situation:* Victor is trying to save money to buy a pair of sneakers that cost $68. He has $15 and each week he should be able to save $5 more.

The **independent variable** is the value that is changing. It is “independent” in that it does not follow or depend on anything else.

What is the independent variable? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The **dependent variable** is the value that is being affected by the change. It “depends” on the independent variable.

What is the dependent variable? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fill in the table to see how much money he will have after so many weeks.

|  |  |
| --- | --- |
| Week | Money saved |
| 0 | 15 |
| 1 | 20 |
| 2 |  |
| 3 |  |
| 5 |  |
| 10 |  |

How are the variables related? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write an equation that represents how many weeks it will take Victor to have enough money to buy the shoes. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The independent variable is always the *x-value*, and the dependent variable is always the *y-value*. Graph the situation on a coordinate plane.

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Jasmine is traveling to her friend’s house. She travels 65 miles per hour to get there. If she travels h hours, how many miles will she have traveled?

What is the independent variable?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the dependent variable? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write an equation that will help you to find the total distance it takes Jasmine to reach her friend’s house. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fill in the table with the missing values:

|  |  |
| --- | --- |
| Hours | Distance |
| 0 |  |
| 1 |  |
| 2 |  |
| 5 |  |
| 10 |  |

Graph the distance Jasmine will travel on a coordinate plane.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
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